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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,064	03/09/2005	Hendrik Middeljans	122217	5125

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OLIFF & BERRIDGE, PLC  
P.O. BOX 320850  
ALEXANDRIA, VA 22320-4850

EXAMINER
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TENTON, LEO B

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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10/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/520,064

**Applicant(s)**

MIDDELJANS ET AL.

**Examiner**

Leo B. Tentoni

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-18 is/are pending in the application.
- 4a) Of the above claim(s) 12-15, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11 and 16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 June 2009 has been entered.

***Election/Restrictions***

2. Claims 12-15, 17 and 18 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 21 November 2008.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a),

the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 4-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimuzu et al (JP 05195309 A) in combination with Schafer et al (U.S. Patent 6,103,158 A) and Hutter et al (U.S. Patent 6,551,545 B1).

Shimuzu et al (see the entire document, in particular, the English-language translation; Figure 1) teaches a process of making multifilament thread from a thermoplastic material including the steps of extruding a melted thermoplastic material through a spinneret to form a plurality of filaments and cooling the filaments beneath the spinneret, wherein the cooling is conducted in two steps in a first cooling zone and a second cooling zone (which is beneath the first cooling zone), in the first cooling zone, gas is blown from a blowing device transversely through the filaments by sucking the gas with a suction device (the filaments are disposed between the blowing device and suction device), wherein the gas in the first cooling zone leaves on a side opposite an inflow side, and in the second

cooling zone, the filaments are cooled by gas. Shimuzu et al does not explicitly teach (1) winding the filaments after solidifying (Shimuzu et al does teach making multifilament thread for use in garments and industrial materials), (2) that gas leaves substantially completely on a side opposite an inflow side in a first cooling zone (Shimuzu et al does teach that gas leaves on a side opposite an inflow side in a first cooling zone), or (3) self-suction of a cooling gas in a second cooling zone (Shimuzu et al does teach cooling filaments in a second cooling zone using gas). Schafer et al (see the entire document, in particular, col. 4, line 12 to col. 6, line 6; Figure 1) teaches a process of making multifilament thread from thermoplastic material including the steps of winding the filaments after solidifying and having gas leave substantially completely on a side opposite an inflow side in a first cooling zone, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Shimuzu et al in view of Schafer et al principally in order to store the filaments after solidification and to provide for flow of cooling gas through the filaments. Hutter et al (see the entire document, in particular, col. 5, lines 55-59) teaches a process of making multifilament thread from thermoplastic material including the step of cooling filaments in a second cooling zone by self-suction, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Shimuzu et al

in view of Hutter et al principally in order to cool the filaments in the second cooling zone.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimuzu et al (JP 05195309 A) in combination with Schafer et al (U.S. Patent 6,103,158 A) and Hutter et al (U.S. Patent 6,551,545 B1) as applied to claims 1, 4-11 and 16 above, and further in view of Gerking et al (U.S. Patent 4,202,855 A).

Shimuzu et al does not explicitly teach the claimed gas flow speed of the gas in the first cooling zone. Shimuzu et al does teach cooling gas flow in a first cooling zone. Gerking et al (see the entire document, in particular, Example 1) teaches a process of making multifilament thread from thermoplastic material including a gas flow of 0.5 m/sec in a first cooling zone, and such would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Shimuzu et al in view of Gerking et al principally in order to provide a desired gas flow to cool the filaments and improve filament properties.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 3-11 and 16 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B.

Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leo B. Tentoni/  
Primary Examiner, Art Unit 1791